REMARKS

In the Office Action mailed September 28, 2010, the Examiner objected to the Specification and rejected pending claims 1-3 and 5-6 under 35 U.S.C. § 103(a). In response, Applicants have amended the Specification by to address the Examiner's rejection and request reconsideration of the rejection of claims 1-3 and 5-6 for the reasons appearing below.

Specification

The Examiner objected to the Substitute Specification submitted on March 16, 2009 because the abstract of the disclosure did not appear on a separate sheet in accordance with 37 CFR § 1,52(b) (4). Applicants apologize for this error and have enclosed a Second Substitute Specification in which the abstract appearing on the same sheet as other text of the Specification has been cancelled and a new abstract appearing on a separate page is included.

Applicants have prepared their amendment by substitute specification in accordance with 37 CFR § 1.121(b)(3). Applicants request that the Specification be replaced by the clean copy of the Second Substitute Specification attached hereto. Applicants submit that the only amendments made in the enclosed Second Substitute Specification were to formatting of the abstract. Accordingly, no new matter has been introduced in the Specification.

Applicants believe that the amended Specification addresses an cures the Examiner's objection. As a result, Applicants request that the objection to the Specification be reconsidered and withdrawn.

Rejection of Claims 1-3 and 5-6 under 35 U.S.C. § 103

Claims 1-3 and 5-6 stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent Number 6,048,628 issued to Hillmann (hereinafter "Hillmann") in view of Japanese Patent Number JP 2000-158165 listing Takemoto as an inventor (hereinafter "Takemoto"). Applicants respectfully disagree and request reconsideration for at least the following reasons.

For a rejection under 35 U.S.C. § 103(a) to be proper, the references, either alone or in combination, must teach, suggest, or make obvious all of the claim limitations. Applicants

respectfully submit that none of the 103 references, alone or in combination, teaches or suggests each and every element of Applicants' claimed invention. In addition, Applicants submit that the combination of Hillmann and Takemoto fails to make the subject matter of claim 1 obvious as there is no motivation, teaching or reason to combine the references as provided in the Office Action.

Applicants' independent claim 1 is directed to a method for the production of a sheet metal plate, for the manufacture of motor vehicle body components with at least one local reinforcement. The method includes a number of steps including:

producing, in a continuous production process, a sheet metal strip with strips of differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip;

cutting individual sheet metal sections with straight cut edges to length from the sheet metal strip; and

joining a first sheet metal section of this sheet metal strip to a second sheet metal section, with a join line running straight and transversely to the longitudinal direction of the strips of the first sheet metal section, in such a way that the local reinforcement zones come to lie in the strips with greater thickness and/or quality.

With the implementation of the above method steps, Applicants have discovered that it is possible to join a metal sheet manufactured from a tailored strip having enforced parts with a different thickness or material quality with a second metal sheet which allows for an easy production of comparatively complex locally reinforced parts, while at the same time minimizing scrap. (See for example, page 1 of the Substitute Specification submitted on March 16, 2009 stating "[t]he invention is based on the object of developing a sheet metal plate which satisfies the requirements for lightweight construction in conjunction with adequate strength in areas subject to high mechanical stress, which is simple to manufacture and does not incur any scrap.")

In contrast to Applicants' claimed method, neither Hillmann nor Takemoto teach or suggest the cutting and joining steps of Applicants' claimed method. In addition, Hillmann, as acknowledged on page 5 of the Office Action, also fails to teach or suggest Applicants' claimed, producing, in a continuous process step. That is Hillmann teaches a multiple plate structure of zonal design intended to overcome the "disadvantages" of using conventional tailored blanks. (See Hillmann column 1, lines 28-38 and column 2, lines 7-9). Hillmann's disclosure is directed

to a formed part having a multiple-plate structure. Hillmann discloses the formation of the formed part by providing a base plate and reinforcing plates on the base plates. The reinforcing plates adjoining each other in a positive-locking manner so that a structure like a patchwork carpet is present. (See column 2, lines 15-19). Hillmann's discusses several embodiments in which a number of reinforcing plates are joined to a base plate. However, nowhere in Hillman is there a teaching or a suggestion that once a multiple-plate structure is formed is it cut. That is, Hillmann fails to teach or suggest cutting individual sheet metal sections with straight cut edges to length from the sheet metal strip (i.e., a metal strip with strips of differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip). Further as Hillmann fails to teach cutting individual sheet metal sections, his disclosure can not possibly teach or suggest joining a first sheet metal section to a second sheet metal section. As a result, Hillmann fails to teach all three of Applicants' steps claimed in independent claim 1.

Takemoto does teach the production of a tailored blank with three different kinds of steel (i.e., producing, in a continuous production process, a sheet metal strip with strips of differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip). (See, for example, the Abstract of Takemoto.) However, Takemoto fails to teach the cutting and joining steps that are also required by Applicants' independent claim 1. That is, the English translation of Takemoto describes the joining of steel strips 1, 2, and 3 by welding and pressing (see, for example, abstract, and pages 3-7 of the English translation), but nowhere does Takemoto discuss further processing steps of the joined sheets (i.e., cutting of a joined sheet to length or joining a cut join sheet to another sheet). As a result, Takemoto, fails to teach two of Applicants' required three steps recited in claim 1.

In addition to failing to teach or suggest at least two of three of Applicants' claimed method steps, Applicants respectfully submit that one of ordinary skill in the art would not combine Hillmann and Takemoto to arrive at Applicants claimed invention. That is, the disclosures of Hillmann and Takemoto do not provide any hints or motivation to arrive at Applicants' claimed method.

As Takemoto provides one of Applicants three claimed step, whereas Hillmann fails to teach any of Applicants' claimed steps, Applicants consider Takemoto to be the primary reference. As discussed above, Takemoto discloses that the three steel belts or strips of different

quality are jointed continuously by laser welding. (See, for example, the English Abstract and Fig. 1). At the same time the steel belts/strips are pressed together by rollers to improve the welding process. (See, for example, Abstract). As a result, Takemoto discloses "producing, in a continuous process, a sheet metal strip with strips of differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip." However, Takemoto fails to provide any disclosure, teaching or suggestion on further processing of the steel strip formed of the three laser welded and pressed belts/strips.

In addition, no further motivation is provided by Takemoto to solve Applicants' objective of providing a lightweight construction in conjunction with adequate strength in areas subject to high mechanical stress, which is simple to manufacture and does not incur any scrap. Applicants' objective is solved by not only producing, in a continuous process, a sheet metal strip with strips of differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip" but also by the two following steps of cutting and joining the metal sheet sections in the way recited in claim 1. The step of cutting individual sheet metal sections with straight cut edges to length from the sheet metal strip, and joining a first sheet metal section of the sheet metal strip to a second sheet metal section, with a join line running straight and transversely to the longitudinal direction of the strips of the first sheet metal section, in such a way that the local reinforcement zones come to line in strips with greater thickness and/or quality - are not taught by Takemoto. Nor would one of ordinary skill in the art reading the problem to be solved in Takemoto (i.e., to boost productivity and welding quality of the joined steel belts when three different kinds of steel belts are jointed to manufacture a steel belt for a tailored blank – see Abstract) be lead to Applicants' claimed further processing steps which solve the problems of reducing the complexity of manufacturing and creation of scrap, while providing a lightweight construction having adequate strength in areas subjected to high mechanical stress.

Hillman does not provide any teachings or suggestions to modify Takemoto to arrive at Applicants' claimed method. Hillman as discussed above discloses a formed part having a multiple plate structure that is formed of a thin base plate with multiple reinforcing plates welded thereto. (See, for example, Hillmann, column 2, lines 46-52 and Figs. 1-3). The reinforcing plates are constructed with projections which engage each other along the abutting edges. (See, for example, claim 1 of Hillman and Fig. 1). This way a local adaptation of the plates to

requirements in the automotive sector for example such as strength can be achieved. (See, column 2, lines 5-12). In addition and as discussed above, Hillmann discloses that utilizing the conventional tailored blanks is disadvantageous and has limits placed on the reduction in weight (see, column 1, lines 28-38) – thus one of ordinary skill in the art would not have motivated or thought it obvious to combine Hillmann with Takemoto as one reference relates to non-tailored blank methods while the other requires the use of tailor blank methods.

Moreover, there are no hints, suggestions or motivation within the disclosure of Hillmann to provide the two steps missing in Takemoto and claimed by Applicants. Hillmann merely discloses that by means of a patchwork technique individual parts of a base plate can be reinforced by fastening further plates (reinforcing plates) on the base plate. Due to the fact that those plates need to be welded on the base plate implicates quite an expenditure of time. ("The more differentiated the load structure is in a certain zone, the smaller and more varied in thickness is the configuration of the reinforcing plates which are arranged in a positive-locking manner in that zone." See for example, column 2, lines 23-27.) However, Applicants objective is to reduce the complexity of manufacturing (as well as a reduction in scrap). As discussed above, Hillmann provides no teaching of further processing the multiple plate structure formed of the base and reinforcing plates. In view of Hillmans' lack of disclosure of Applicants' claimed cutting and joining steps together with Hillmann's requirement for welding each plate to create the multiple plate structure and further in view of Hillman's teaching away of using tailored blanks, one of ordinary skill in the art would not arrive at Applicants' claimed method nor would one combine it with Takemoto to arrive at the claimed invention.

In view of Takemoto, one of ordinary skill in the art would not have come to the solution to cut striated sheet metal sections from a produced strip with straight cut edges and to perform a further processing step wherein the sheet metal section is joined with a straight running join line with at least a second sheet metal section in such a way that the parallel strips are perpendicular to the join line. By utilizing Applicants' claimed method, relatively simple manufacturing using straight cuts and join lines can be used to create a complex structure for a region of reinforcement and at the same time scrap is reduced to a minimum in spite of the complex structure. As a result, the method steps recited are not ones of mere engineering design. Rather by providing a perpendicular arrangement of the parallel strips and join lines solves the problems

of creating complex structures using simple manufacturing techniques while reducing scrap, improvements over both Takemoto and Hillmann.

As neither Hillmann or Takemoto, alone or in combination, teach, suggest, or make obvious Applicants' claimed method recited in independent claim 1, Applicants request reconsideration and the withdrawal of the 35 U.S.C. § 103 rejection of claim 1 and all of its depending claims.

CONCLUSION

In view of the foregoing and enclosed Second Substitute Specification, Applicants respectfully request that all objections and rejections be reconsidered and withdrawn. The Examiner is welcome to contact Applicants' attorneys with any questions.

Respectfully submitted,

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